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10/644,725	08/21/2003	Tae-Hwan Kim	Q76080	6192

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EXAMINER

TRAN, TRANG U

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/644,725	Applicant(s) KIM, TAE-HWAN	
	Examiner Trang U. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9-13 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4-8 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Oct. 16, 2006 have been fully considered but they are not persuasive.

In re pages 16-17, applicant argues that the Examiner has failed to establish a proper prima facie case of unpatentability under 35 U.S.C. § 101 because the Examiner does not appear to have followed the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Guidelines"), which state that—among other responsibilities—the Examiner should "identify the features of the invention that would render the claimed subject matter statutory if recited in the claim" and, if the Examiner determines that the claimed invention preempts a 35 U.S.C. § 101 judicial exception (as stated in the Office Action), the Guidelines then require the Examiner to identify the abstraction, law of nature, or natural phenomenon and explain why the claim covers every substantial practical application of that abstraction, law of nature, or natural phenomenon.

In response, the examiner respectfully disagrees. In the Interim Guidelines clearly state that "A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. § 101. To be statutory, a claimed process must either: (A) result in a physical transformation for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application which produces a useful, tangible, and concrete result. See *Diehr*, 450 U.S. at 183-84, 209 USPQ at 6

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(quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88(1976))". Thus, claims 11-13 recite a method of resetting setting information without a limitation to a practical application. A practical application exists if the result of the claimed invention is "useful, concrete and tangible" (with the emphasis on "result")(Guidelines, section IV.C.2.b). A "useful" result is one that satisfies the utility requirement of section 101, a "concrete" result is one that is "repeatable" or "predictable", and a "tangible" result is one that is "real", or "real-world", as opposed to "abstract" (Guidelines, section IV.C.2.b)). Since claims 11-13 do not recite practical application, claims 11-13 are non statutory. Additionally, the processing steps of claims 11-13 manipulate data or an abstract idea and one may not patent a process that comprises every "substantial practical application" of an abstract idea because such a patent "in practical effect would be a patent on the [abstract idea] itself".

In re page 17, applicant argues that Mizutome does not disclose "a control unit configured to sequentially store setting data" as claimed, for example, in claim 1; instead, Mizutome appears to store setting data in a look-up table format so that new data frequently overwrites old data.

In response, the examiner respectfully disagrees. As recognized by applicant that Mizutome stores setting data in a look-up table format. When storing the setting data in a look-up table format, the setting data should be stored sequentially as claimed. Thus, Mizutome does indeed disclose the claimed "a control unit configured to sequentially store setting data" as claimed.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-13 and 18-20 are rejected under 35 U.S.C. 101 because they are not a **new and useful** process, machine, manufacture, or composition of matter. The claimed re-setting setting information and method has no **practical application of the § 101 judicial exception** and are seeking to **pre-empt** the use of the claimed method.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 9-11, 13, 18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipate by Mizutome et al. (US Patent No. 6,943,845 B2).

In considering claim 1, Mizutome et al discloses all the claimed subject matter, note 1) the claimed a tuner configured to select a broadcast signal is met by the tuner 101 (Fig. 2, col. 4, lines 22-60), 2) the claimed an external signal input unit configured to receive an external signal is met by the external AV devices 1B, 1C and D-VHS, etc. (Fig. 1, col. 4, line 61 to col. 5, line 67), 3) the claimed a signal processing unit configured to process one of the broadcast signal selected and the external signal, and

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to reproduce video images on a display and audio output through a speaker is met by the digital TV receiving unit 1A and the information processing device 1D (Fig. 1, col. 5, col. 1 to col. 6, line 54), and 4) the claimed a control unit configured to sequentially store setting data for setting environments of said tuner, said external signal input unit, and said signal processing unit according to an externally applied control signal, and to set the setting environment of at least one of said tuner, said external signal input unit, and said signal processing unit with one of previous setting data and subsequent setting data based on any one data set of the sequentially stored setting data in response to a state changing signal applied from an external source is met by the CPU 123 which includes an attribute detecting unit 130 for detecting the attribute of the input source,..., and the RAM 122 operates as an external memory for the CPU 123 and its part functions as a history database storage unit 132 for storing a user history database, the user selects and operates an input medium, a television channel or the external device in association with a proper operation screen and it is basically controlled by the remote controller 125 (Figs. 1-3 and 12, col. 6, line 55 to col. 12, line 30).

In considering claim 2, Mizutome et al discloses all the claimed subject matter, note 1) the claimed said signal processing unit comprising: a signal separator configured to separate one of the broadcast signal selected and the external signal into a video signal and an audio signal is met by the MPEG2 demultiplexer 104 (Fig. 1, col. 4, lines 40-52), 2) the claimed a video signal processing unit configured to process and output to the display the video signal of said signal separator is met by the video decoder 106 (Fig. 1, col. 4 line 53 to col. 6, line 46), and 3) the claimed an audio signal

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processing unit configured to process and output to the speaker the audio signal of said signal separator is met by the audio decoder 105 and the audio control unit 108 (Fig. 1, col. 4 line 53 to col. 6, line 46).

In considering claim 3, Mizutome et al discloses all the claimed subject matter, note 1) the claimed said control unit comprising: a micro controller configured to receive and interpret the control signal and the state changing signal, and to control at least one of said tuner, said external signal input unit, and said signal processing unit is met by the CPU 123 which includes an attribute detecting unit 130 for detecting the attribute of the input source,..., and the RAM 122 operates as an external memory for the CPU 123 and its part functions as a history database storage unit 132 for storing a user history database, the user selects and operates an input medium, a television channel or the external device in association with a proper operation screen and it is basically controlled by the remote controller 125 (Figs. 1-3 and 12, col. 6, line 55 to col. 12, line 30), and 2) the claimed a state setting unit configured to store setting data output from said micro controller, and to output, in response to the state changing signal, one of previous setting data of the stored setting data and subsequent setting data of the stored setting data to at least one of said tuner, said external signal input unit, and said signal processing unit is met by updating the history database (Fig. 4, col. 9, line 65 to col. 11, line 54).

Claim 9 is rejected for the same reason as discussed in claim 1 and further the claimed the video displayer comprising a control key configured to control said video displayer is met by the remote controller 125 (Fig. 2, col. 7, lines 14-48), and the

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claimed at least two state changing keys configured to generate the state changing signal is met by input source selection button 202, channel button 201 or menu button 211 (Fig. 2, col. 7, lines 14-48).

In considering claim 10, Mizutome et al discloses all the claimed subject matter, note 1) the claimed said state changing keys comprising: a previous state selection key configured to select a previous setting state based on the setting data stored in said video displayer is met by the generation of history database (Figs. 1-3 and 12, col. 6, line 55 to col. 12, line 30), and 2) the claimed a subsequent state selection key configured to select a subsequent setting state based on the setting data stored in said video displayer is met by updating the history database (Fig. 4, col. 9, line 65 to col. 11, line 54).

In considering claim 11, Mizutome et al discloses all the claimed subject matter, note 1) the claimed sequentially storing the broadcast channels of the video displayer and setting data for images and sounds for the broadcast channels or the external inputs, whenever one of the broadcast channels or the external inputs is switched is met by the CPU 123 which includes an attribute detecting unit 130 for detecting the attribute of the input source,..., and the RAM 122 operates as an external memory for the CPU 123 and its part functions as a history database storage unit 132 for storing a user history database, the user selects and operates an input medium, a television channel or the external device in association with a proper operation screen and it is basically controlled by the remote controller 125 (Figs. 1-3 and 12, col. 6, line 55 to col. 12, line 30), 2) the claimed resetting the video displayer according to one of previous setting

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data and subsequent setting data, based on setting data for a broadcast channel to which the video displayer is tuned as reference setting data in response to a state changing signal from an external source is met by updating the history database (Fig. 4, col. 9, line 65 to col. 11, line 54), and 3) the claimed re-setting the re-set setting data as reference setting data is met by store updating (or renewal) the history database (Fig. 4, col. 9, line 65 to col. 11, line 54).

In considering claim 13, Mizutome et al discloses all the claimed subject matter, note 1) the claimed the state changing signal comprising: a first state changing signal configured to reset the video displayer based on previous setting data with respect to the reference setting data is met by the generation of history database (Figs. 1-3 and 12, col. 6, line 55 to col. 12, line 30), and 2) the claimed a second state changing signal configured to reset the video displayer based on subsequent setting data with respect to the reference setting data is met by updating the history database (Fig. 4, col. 9, line 65 to col. 11, line 54).

Claim 18 is rejected for the same reason as discussed in claim 11.

Claim 20 is rejected for the same reason as discussed in claim 13.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutome et al. (US Patent No. 6,943,845 B2).

In considering claim 12, Mizutome et al disclose all the limitations of the instant invention as discussed in claim 11 above, except for providing the claimed wherein in the sequentially storing the setting data is stored in a First In First Out (FIFO) parallel shift register configured to discard the setting data in an order of input, when the setting data exceeds a capacity of the FIFO parallel shift register. The capability of using the First In First Out (FIFO) parallel register configured to discard the setting data in the order of input is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of the First In First Out (FIFO) parallel register configured to discard the setting data in the order of input into Mizutome et al's system in order to allow transmission of the data to the later circuit at a desired rate.

Claim 19 is rejected for the same reason as discussed in claim 12.

Allowable Subject Matter

8. Claims 4-8 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 identifies the distinct features: "said state setting unit comprising: an address generator configured to generate an address in response to the state changing signal; a parallel shift register configured to output stored setting data to at least one of said tuner, said external signal input unit, and said signal processing unit, based on the

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address generated by said address generator; and a register output detector configured to decrease the address generated by said address generator by one address block upon detecting a shift operation of the parallel shift register". The closest prior art, Mizutome et al. (US Patent No. 6,943,845 B2), either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 21, 2006



Trang U. Tran
Primary Examiner
Art Unit 2622